

Graduation Internship Offer: Study, Development and Comparison of Machine Learning Algorithms for Recommender Systems and Users Profiling

Nicolas Winckler - Senior Software Developer at QuanoX

About QuanoX

QuanoX (www.quanox.com) provides live recommendations as a service based on access to big data combined with a strong privacy focus. The aim is to beat the current market in providing better and more relevant recommendations based on a substantial and broad set of data, while placing the consumers in full control of any data related to them. The company is built around business and product development as well as research. The whole team is sitting in Luxembourg with a strong focus on generating a solid product and a great working atmosphere.

Objective of the Internship

The intern will be in charge of studying, proposing and comparing techniques for recommender systems and users profiling. In short, we expect from the intern:

- To study and review the literature (Bayesian Approaches, Collaborative Filtering, Matrix Factorization, Latent Dirichlet Allocation, etc.).
- To adapt / improve existing techniques recommendations and to propose / implement new approaches.
- To evaluate these techniques in a real scenario (user feedback, performance measure, etc.) and to adapt / improve them based on the results of the evaluation.
- To implement the cross-consumption vision of the company (combining models).
- To document and report on the project.

Main Technologies:

Programming	Databases	Libraries / Frameworks	Tools	Machine Learning / NLP
C++11 or greater	MongoDB	Boost	CMake	Classification, Regression
Python, MATLAB		sickit-learn, mlpack	Git	Clustering, Topic Modeling
Java		Petuum, DMTK, Spark	Data Visualisation	Probabilistic Graphical Models

At the end of the internship, a research paper could be written and submitted to an international conference.

Profile of the Candidate

- Student in the last year of MSc / Engineering Degree in Computer Science / IT or Mathematical Engineering.
- Passionate about working with machine learning / big data technologies.
- Strong interest in programming and IT.
- Strong analytical skills.
- Passionate about being part of a start-up company.
- Able to work and communicate in an English speaking environment.

Information

- Duration: approximately 5 months.
- Starting Date: February, March or April 2017.
- Monthly net salary: 1,000€.
- Possibility that the internship could lead to a permanent position.

To apply or if you have any question, please contact Nicolas Winckler at nw@quanox.com.